

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A recording and reproduction disk control unit which controls recording and reproduction of digital data onto/from a disk-shaped recording medium, which ~~that~~ has a data recordable area where the digital data composed of either one or both of image data and voice data are recorded, and one or more management information areas where recording management information employed for management of the digital data is recorded, said recording and reproduction disk control unit comprising:

a data recording and reproduction means for recording digital data and recording management information onto the disk-shaped recording medium, and reading the digital data and the recording management information from the disk-shaped recording medium;

a data holding means for temporarily holding the digital data;

an image/voice data management means for monitoring whether or not there is a room for recording of digital data by the said data recording and reproduction means ~~or~~ notwhile said data recording and reproduction means takes out the held digital data from said data holding means and records the digital data onto the disk-shaped recording medium; and

a recording management information management means for temporarily holding recording management information and outputting the recording management information to the said data recording and reproduction means to be recorded on the disk-shaped recording medium when the said image/voice data management means detects that there is a room for recording of the digital data by the said data recording and reproduction means.

2. (Currently amended) The recording and reproduction disk control unit as defined in Claim 1, wherein:

the disk-shaped recording medium has two or more management recording areas; and

the said data recording and reproduction means records recording management information in the two or more management information areas in turn when recording the recording management information onto the disk-shaped recording medium.

3. (Currently amended) The recording and reproduction disk control unit as defined in Claim 2, wherein the recording management information recorded on the disk-shaped recording medium includes as backup information, recording recency information which indicates whether the recording management information is most newly recorded, ~~as backup information.~~

4. (Currently amended) The recording and reproduction disk control unit as defined in Claim 2, wherein the recording management information recorded on the disk-shaped recording medium includes as backup information, disconnection-during-recording information which indicates whether or not a power disconnection of ~~the disk-said~~ recording and reproduction disk control unit is generated while the recording management information is recorded on the disk-shaped recording medium, ~~as backup information.~~

5. (Currently amended) The recording and reproduction disk control unit as defined in Claim 2, wherein the recording management information recorded on the disk-shaped recording medium includes as backup information, operational state information which indicates whether or not the recording management information is recorded on the disk-shaped recording medium during recording of digital data ~~or not, as backup information.~~

6. (Currently amended) The recording and reproduction disk control unit as defined in Claim 2, wherein;

backup information, which is information concerning recording of the recording management information, is included in the recording management information recorded on the disk-shaped recording medium;

the backup information is not included in the recording management information temporarily held by ~~the-said~~ recording management information management means; and

the-said recording management information management means adds the backup information to the recording management information temporarily held by the-said

recording management information management means to be output to the said data
recording and reproduction means.

7. (Currently amended) The recording and reproduction disk control unit as defined
in Claim 2, wherein:

the recording management information recorded on the disk-shaped recording
medium includes backup information as information concerning recording of the
recording management information;

the recording management information temporarily held by ~~the said~~ recording
management information management means includes the backup information; and

~~the said~~ recording management information management means updates the
backup information included in the recording management information temporarily held
by ~~the said~~ recording management information management means to be output to the
said data recording and reproduction means.

8. (Currently amended) The recording and reproduction disk control unit as defined
in Claim 2, wherein ~~the said~~ recording management information management means
selects the recording management information which is most newly recorded with no
power disconnection generated during recording from recording management information
recorded on the disk-shaped recording medium at a startup of the said recording and
reproduction disk control unit.

9. (Currently amended) A disk device having ~~the said~~ recording and reproduction
disk control unit as defined in Claim 1 built-in.

10. (New) A recording and reproduction disk control unit which controls recording
and reproduction of digital data onto/from a disk-shaped recording medium, which has a
data recordable area where the digital data composed of either one or both of image data
and voice data are recorded, and one or more management information areas where
recording management information employed for management of the digital data is
recorded, said recording and reproduction disk control unit comprising:

a data recording and reproduction unit operable to record digital data and recording management information onto the disk-shaped recording medium, and read the digital data and the recording management information from the disk-shaped recording medium;

a data holding unit operable to temporarily hold the digital data;

an image/voice data management unit operable to monitor whether or not there is room for recording digital data by said data recording and reproduction unit while said data recording and reproduction unit takes out the held digital data from said data holding unit and records the digital data onto the disk-shaped recording medium; and

a recording management information management unit operable to temporarily hold recording management information and output the recording management information to said data recording and reproduction unit to be recorded on the disk-shaped recording medium when said image/voice data management unit detects that there is room for recording of the digital data by said data recording and reproduction unit.

11. (New) The recording and reproduction disk control unit as defined in Claim 10, wherein:

the disk-shaped recording medium has two or more management recording areas; and

said data recording and reproduction unit is operable to record recording management information in the two or more management information areas in turn when recording the recording management information onto the disk-shaped recording medium.

12. (New) The recording and reproduction disk control unit as defined in Claim 11, wherein the recording management information recorded on the disk-shaped recording medium includes, as backup information, recording recency information which indicates whether the recording management information is most newly recorded.

13. (New) The recording and reproduction disk control unit as defined in Claim 11, wherein the recording management information recorded on the disk-shaped recording

medium includes, as backup information, disconnection-during-recording information which indicates whether or not a power disconnection of said recording and reproduction disk control unit is generated while the recording management information is recorded on the disk-shaped recording medium.

14. (New) The recording and reproduction disk control unit as defined in Claim 11, wherein the recording management information recorded on the disk-shaped recording medium includes, as backup information, operational state information which indicates whether or not the recording management information is recorded on the disk-shaped recording medium during recording of digital data.

15. (New) The recording and reproduction disk control unit as defined in Claim 11, wherein:

backup information, which is information concerning recording of the recording management information, is included in the recording management information recorded on the disk-shaped recording medium;

the backup information is not included in the recording management information temporarily held by said recording management information management unit; and

said recording management information management unit is operable to add the backup information to the recording management information temporarily held by said recording management information management unit to be output to said data recording and reproduction unit.

16. (New) The recording and reproduction disk control unit as defined in Claim 11, wherein:

the recording management information recorded on the disk-shaped recording medium includes backup information as information concerning recording of the recording management information;

the recording management information temporarily held by said recording management information management unit includes the backup information; and

said recording management information management unit is operable to update the backup information included in the recording management information temporarily held by said recording management information management unit to be output to said data recording and reproduction unit.

17. (New) The recording and reproduction disk control unit as defined in Claim 11, wherein said recording management information management means selects the recording management information which is most newly recorded with no power disconnection generated during recording from recording management information recorded on the disk-shaped recording medium at a startup of said recording and reproduction disk control unit.

18. (New) A disk device having said recording and reproduction disk control unit as defined in Claim 1 built-in.